AMENDMENTS TO THE CLAIMS

1.	(Currently Amended)	~~An ethernet communications system for a~~ <u>A</u> power monitoring system <u>including multiple power monitoring devices; and</u>~~, said ethernet communications system comprising~~ an ethernet communication device operative ~~in association with a~~ <u>within at least a selected one of said</u> power monitoring ~~device~~ <u>devices</u>, said ethernet communications device including:

~~a processor capable of functioning as a master device;~~

a pair of on-board Ethernet ports for connecting said communication device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber<u>,</u> <u>said Ethernet ports comprising a single physical interface chip capable of supporting dual physical Ethernet media types</u>,

<u>an on-board serial port for connecting said communication device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain,</u>

<u>a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports, and</u>

~~a communications interface capable of gathering, under control of said processor real-time information from one or more slave devices;~~

~~said processor and said communications interface further being operative for presenting said real-time information in a format useable by~~ <u>a Hypertext Transfer Protocol (HTTP) server operating on said processor for dynamically gathering, formatting and verifying real-time information from both said selected power monitoring device and said other power monitoring devices connected to said serial port in a daisy chain, for communicating with an internet browser, and for accessing</u> Hypertext Markup Language (HTML) pages.

2.	(Currently Amended)	The system of claim 1 wherein said processor is ~~further~~ capable of functioning as <u>both a master device and</u> a slave device.

3.	(Currently Amended)	The system of claim [[1]] <u>2</u> wherein said processor and said slave device are coupled, by said ~~communications interface~~ <u>serial port</u>, in a daisy chain and wherein said ethernet communications device is capable of using any of a plurality of protocols for either full duplex or half duplex communications, including SyMax, Modbus and Jbus.

4.	(Currently Amended)	The system of claim 1 ~~said ethernet communications device further including a server coupled with said communications interface, said server~~

~~operating~~ <u>wherein said HTTP server operates</u> for sending data to a browser for dynamically formatting and verifying real-time data gathered by said ~~processors~~ <u>processor</u> and communications interfaces using JavaScript and VB script.

5. (Currently Amended) The system of claim 1, ~~said ethernet communications device further including a server operatively coupled with said communications interface, and~~ further including a web browser capable of accessing said server and at least one processor in communication with said server, said web browser generating a login, and said processor responding to said login by generating an access token for said browser for permitting access by said browser for a predetermined amount of time.

6. (Canceled)

7. (Currently Amended) The system of claim [[6]] <u>1</u> wherein communications ~~interface~~ <u>device</u> comprises a fast ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an RJ45 interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100Base Fx fast fiber transceivers.

8. (Canceled)

9. (Currently Amended) An industrial power metering system comprising:

[[a]] <u>multiple</u> power monitoring ~~device~~ <u>devices</u>; and

an Ethernet communications device <u>within at least a selected one of</u> ~~operatively coupled with~~ said power monitoring ~~device~~ <u>devices</u>;

said Ethernet communications device including

~~a processor and~~

<u>a pair of on-board Ethernet ports for connecting said communications device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber,</u>

<u>an on-board serial port for connecting said communications device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain,</u>~~a communications interface capable, under control of said processor, of gathering real-time information from said power monitoring device; and~~

<u>a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports, and</u>

a ~~web~~ Hypertext Transfer Protocol (HTTP) server operating on said processor ~~capable of communicating through said communications interface~~ for dynamically gathering, formatting and verifying real-time information from both said selected [[the]] power monitoring device and said other power monitoring devices connected to said serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages, including custom HTML pages stored in the selected power monitoring device.

10. (Original) The system of claim 9 wherein said processor is further capable of functioning as a slave device.

11. (Currently Amended) The system of claim 9 ~~wherein said processor and said slave device are coupled, by said communications interface in a daisy chain and~~ wherein said ethernet communications device is ~~devices are~~ capable of using any of a plurality of protocols for either full duplex or half duplex communications, including SyMax, Modbus and Jbus.

12. (Currently Amended) The system of claim 9 wherein said ~~web~~ HTTP server operates for sending data to a browser for dynamically formatting and verifying real-time data gathered by said processors and communications interfaces using JavaScript and VB script.

13. (Currently Amended) The system of claim 9 and further including a web browser capable of accessing said ~~web~~ HTTP server, said web browser generating a login, and said processor responding to said login by generating an access token for said browser for permitting access by said browser for a predetermined amount of time.

14. (Currently Amended) The system of claim [[8]] 9 wherein said Ethernet ports comprise ~~communications interface comprises~~ a single physical interface chip capable of supporting dual physical Ethernet media types.

15. (Currently Amended) The system of claim 14 wherein said Ethernet ports comprise ~~communications interface device comprises~~ a fast Ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an RJ45 interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100Base Fx fast fiber transceivers.

16. (Canceled)

17. (Currently Amended) An ethernet communications method for a power monitoring system, said method comprising

monitoring an electrical power distribution system with multiple power monitoring devices at least a selected one of which contains an Ethernet communications device having (1) a pair of on-board Ethernet ports for connecting said communications device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) an on-board serial port for connecting said communications device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain, and (3) a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports ; and

dynamically gathering, formatting, verifying and communicating real-time information from both said selected power monitoring device and said other power monitoring devices connected to said serial port in a daisy chain, presenting said real time information in a format useable by Hypertext Markup Language (HTML) pages, under the control of said processor and using a Hypertext Transfer Protocol (HTTP) server capable of communicating through both Ethernet ports and said serial port,

accessing said HTTP server via a web browser and generating a login, said processor responding to said login by generating an access token for said browser for permitting access by said browser for a predetermined amount of time, and

accessing HTML pages, including custom HTML pages stored in the selected power monitoring device, via said HTTP server.

18.   (Canceled)

19.   (Currently Amended) The method of claim 17 in which information is gathered from said other power monitoring devices connected including coupling said slave devices in a daisy chain, and further including using any of a plurality of protocols for either full duplex or half duplex communications, including SyMax, Modbus and Jbus.

20.   (Original) The method of claim 17 and further including dynamically formatting and verifying real-time data gathered by said gathering, using JavaScript and VB script.

21.   (Currently Amended) The method of claim 17, said presenting including using a server and further including accessing said server in which said HTTP server is accessed from a web browser, said web browser generating a login, and said server responding to said login by generating an access token for said browser for permitting access by said browser for a predetermined amount of time.

22. (Original) The method of claim 17 including supporting dual physical ethernet media types using a single physical interface chip.

23. (Original) The method of claim 22 including providing a media independent interface for attachment to a 10/100 media access controller, directly driving an RJ45 interface and providing a pseudo-ECL interface for use with 100Base Fx fast fiber transceivers.

24. (Currently Amended) An ~~industrial~~ electrical power ~~metering~~ monitoring method comprising:

monitoring an electrical power distribution system with multiple power monitoring devices at least a selected one of which contains an Ethernet communications device having (1) a pair of on-board Ethernet ports for connecting said communications device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, said Ethernet ports comprising a single physical interface chip capable of supporting dual physical Ethernet media types, (2) an on-board serial port for connecting said communications device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain, and (3) a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports ; and

~~gathering real-time information from said power monitoring; and~~

dynamically gathering, formatting, verifying and communicating real-time information from [[the]] both said selected power monitoring device and said other power monitoring ~~device~~ devices connected to said serial port in a daisy chain, in a format usable by HTML pages, under the control of said processor and using a Hypertext Transfer Protocol (HTTP) server capable of communicating through both said Ethernet ports and said serial port.

25. (Canceled)

26. (Currently Amended) The method of claim 24 in which information is gathered from said other power monitoring devices connected ~~including coupling said slave devices~~ in a daisy chain, ~~and further including~~ using any of a plurality of protocols for either full duplex or half duplex communications, including SyMax, Modbus and Jbus.

27. (Original) The method of claim 24 and further including dynamically formatting and verifying real-time data gathered by said gathering, using JavaScript and VB script.

28. (Currently Amended) The method of claim 24~~, said presenting including using a server and further including accessing said server~~ in which said HTTP server is accessed from a

web browser, said web browser generating a login, and said server responding to said login by generating an access token for said browser for permitting access by said browser for a predetermined amount of time.

29.   (Original) The method of claim 24 including supporting dual physical ethernet media types using a single physical interface chip.

30.   (Original) The method of claim 29 including providing a media independent interface for attachment to a 10/100 media access controller, directly driving an RJ45 interface and providing a pseudo-ECL interface for use with 100Base Fx fast fiber transceivers.

31-37. (Canceled)

38.   (Currently Amended) An ~~ethernet~~ Ethernet communications card apparatus for a power monitoring system that includes multiple power monitoring devices ~~device~~, said Ethernet communications card being adapted for insertion within at least a selected one of said power monitoring devices and comprising [[;]]

a pair of on-board Ethernet ports for connecting said communications device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, said Ethernet ports comprising a single physical interface chip capable of supporting dual physical Ethernet media types, and including a fast Ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an RJ45 interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100Base Fx fast fiber transceivers,

an on-board serial port for connecting said communications device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain,

a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports,

a Hypertext Transfer Protocol (HTTP) server operating on said processor for dynamically gathering, formatting and verifying real-time information from both said selected power monitoring device and said other power monitoring devices connected to said serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages, including custom HTML pages stored in the selected power monitoring device, said Ethernet communications device being capable of using any of a plurality of protocols for either full duplex or half duplex communications, including SyMax, Modbus and Jbus, said HTTP server

being capable of sending data to a browser for dynamically formatting and verifying real-time data using JavaScript and VB script, and

a web browser capable of accessing said HTTP server and generating a login, and said processor responding to said login by generating an access token for said browser for permitting access by said browser for a predetermined amount of time

~~a processor capable of functioning as a master device;~~

~~a communications interface capable of gathering, under control of said processor real-time information from one or more slave devices;~~

~~said processor and said communications interface further being operative for presenting said real-time information in a format useable by Hypertext Markup Language (HTML) pages.~~

39-41. (Canceled)